

Appl. No: 09/740,212
Amdt. Dated July 9, 2004
Reply to Office Action of May 21, 2004

Amendments to the Claims:

This listing of claims will replace all prior versions and listings of claims in the application:

Listing of Claims:

Claim 1 (previously presented): A system for querying a database in response to a data access requests issued by an application program, the system comprising:

a text file containing queries corresponding to said data access requests, wherein the queries are formatted in accordance with the syntax required by said database;

a database interface function;

a query lookup table, containing said queries, generated by operation of said database interface function on said text file;

wherein, in response to one of said data access requests issued to the database, the database interface function selects the query lookup table from among other query lookup tables containing queries formatted for other databases, locates the query in the selected lookup table corresponding to the issued data access request, sends the query to the database, and retrieves results of the query.

Claim 2 (original): The system of claim 1, wherein said database interface function also formats the results of the query.

Claim 3 (original): The system of claim 2, wherein said database interface function also returns the results of the query after the results have been formatted.

Claim 4 (original): The system of claim 1, wherein the queries in said query lookup table are located by name in response to one of said data access requests.

Claim 5 (original): The system of claim 4, wherein the query name indicates a type of data requested and a type of operation to be performed on the database.

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Claim 6 (original): The system of claim 1, wherein each of the data access requests provided by the application comprises a query name and an argument array.

Claim 7 (original): The system of claim 1, wherein the queries in said text file are SQL strings.

Claim 8 (currently amended): A system for interfacing an application program with more than one type of database in response to data access requests issued by an application program, the system comprising:

- a first text file containing queries corresponding to said data access requests, wherein the queries are formatted in accordance with said first database;

- a database interface function;

- a first query lookup table, containing said queries, generated by operation of said database interface function on said first text file;

- a second database;

- a second text file containing queries, formatted in accordance with said second database, corresponding to said data access requests; and

- a second query lookup table generated by operation of said database interface function on said text file;

wherein, in response to one of said data access requests issued to one of said databases, the database interface function selects the query lookup table containing the queries formatted in accordance with the database, locates the query in the selected lookup table corresponding to the issued data access request, sends the query to the database, and retrieves results of the query.

Claim 9 (original): The system of claim 8, wherein said database interface function also formats the results of the query.

Claim 10 (original): The system of claim 9, wherein said database interface function also returns the results of the query after the results have been formatted.

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Claim 11 (original): The system of claim 8, wherein the queries in said query lookup table are located by name in response to one of said data access requests.

Claim 12 (original): The system of claim 8, wherein each of the data access requests provided by the application comprises a query name and an argument string.

Claims 13 (currently amended): A method for querying a database in response to data access requests issued by an application program, the method comprising the steps of:

storing queries, corresponding to said data access requests, in a text file wherein the queries are formatted in accordance with the syntax required by said database;

reading said text file to generate a query lookup table containing said queries;

submitting, to the database, in response to one of said data access requests, one of said queries from said query lookup table corresponding to said one of said data access requests; [[and]]

retrieving the results of the query[[.]] ;

formatting the results of the query; and

returning the results of the query to the application program after the results have been formatted;

wherein each of the data access requests provided by the application comprises a query name and an argument array.

Claims 14-15 (canceled)

Claim 16 (currently amended): The method of claim [[15]] 13, wherein the queries in said query lookup table are located by name in response to one of said data access requests.

Claim 17 (canceled)

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Claim 18 (previously presented): The method of claim 13, wherein the queries in said text file are SQL strings.

Claim 19 (previously presented): A method for querying a database in response to data access requests issued by an application program, the method comprising the steps of:

- writing database queries to access the database;
- storing said database queries in a text file;
- reading said queries in said text file;
- hashing said queries to generate a query lookup table containing said queries in hashed form;
- receiving, from the application program, one of said data access requests including at least one parameter associated therewith;
- selecting the query lookup table containing the queries formatted in accordance with the database from among other query lookup tables containing queries formatted for other databases;
- locating, in the query lookup table, a selected one of the queries corresponding to said one of said data access requests received from the application program;
- substituting said at least one parameter into corresponding positions in the selected one of the queries;
- submitting, to the database, in response to one of said data access requests, said selected one of the queries; and
- retrieving the results of the query.

Claim 20 (previously presented): The method of claim 19, wherein the queries in said query lookup table are located by name in response to one of said data access requests.

Claim 21 (previously presented): The method of claim 19, wherein each of the data access requests provided by the application comprises a query name and an argument string.

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Claim 22 (previously presented): A method for querying a database in response to data access requests issued by an application program, the method comprising the steps of:

- creating a database interface function to handle said data access requests;
- writing database queries to access the database;
- executing said database interface function to perform the steps of:
 - storing the database queries as query strings in a text file;
 - reading the query strings in said text file;
 - hashing said query strings to generate a query lookup table containing said queries in hashed form;
- receiving, from the application program, one of said data access requests including at least one parameter associated therewith;
- selecting the query lookup table containing the queries formatted in accordance with the database from among other query lookup tables containing queries formatted for other databases;
- locating, in the query lookup table, a selected one of the queries corresponding to said one of said data access requests received from the application program;
- substituting said at least one parameter into corresponding positions in the selected one of the queries;
- submitting, to the database, in response to one of said data access requests, said selected one of the queries; and
- retrieving the results of the query.

Claim 23 (original): The method of claim 22, performed in an object-oriented programming environment wherein the database interface function comprises:

- a parent class that handles application logic common to all queries; and
- a child class that formats the results of the query.

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Claim 24 (original): The method of claim 23, wherein static data in said query lookup table comprises a class attribute available to all subclasses of said parent class without requiring reloading of said query lookup for each of said data access requests.

Claim 25 (previously presented): The method of claim 24, wherein the queries in said query lookup table are located by name in response to one of said data access requests.

Claim 26 (previously presented): The method of claim 22, wherein each of the data access requests provided by the application comprises a query name and an argument string.